

**MEDICAL STUDENTS WITH DISABILITIES**

**AHEAD ANNUAL CONFERENCE**  
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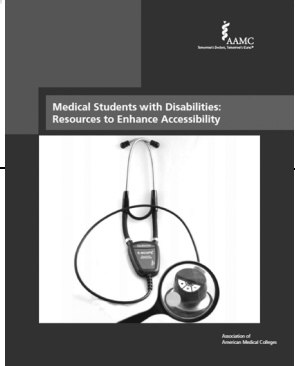
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**MEDICAL STUDENTS WITH DISABILITIES**



Resources to Enhance Accessibility

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**INTRODUCTION**

- × Rationale for Project
- × Getting input from multiple sources
- × What this guidebook is and is NOT
- × Legal overview, disclaimers, caveats

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**EXTERNAL REVIEWERS**

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  - + Dr. Cordes is a blind physician. He graduated from the University of Wisconsin College of Medicine in 2005.
- ✘ Scott Lissner, Ph.D. (All)
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- ✘ Christine Cork, Psy.D. (All)
  - + Dr. Cork is the Director of the Medical Student Counseling Center and Coordinator for Accommodations for the Carver College of Medicine, U. Iowa.

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**OVERVIEW OF BOOK STRUCTURE**

- ✘ Rationale for the Project
- ✘ Introduction and Background
- ✘ What Book is and What it is Not
- ✘ Legal Overview
- ✘ Concept of Universal Design
- ✘ Special Issues and Concerns for this Population
  - + Disclosure, Stigma and Confidentiality
  - + Faculty, Peer and Patient Attitudes

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**CHAPTERS**

- ✦ Working with Medical Students who have Learning Disabilities
- ✦ Working with Medical Students who have ADHD
- ✦ Working with Medical Students who have Psychiatric Disorders
- ✦ Working with Medical Students who have Mobility Impairments
- ✦ Working with Medical Students who have Visual Impairments
- ✦ Working with Medical Students who are Hard of Hearing
- ✦ Working with Medical Students who have Chronic Health Conditions

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**OVERVIEW OF ASSISTIVE TECHNOLOGY**

- ❖ A formal, legal definition of assistive technology was first published in the Technology-Related Assistance for Individuals with Disabilities Act of 1988 and remains in effect today.
- ❖ Any item, piece of equipment, or system, whether acquired commercially, modified, or customized, that is commonly used to increase, maintain, or improve functional capabilities of individuals with disabilities.

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**OVERVIEW OF ASSISTIVE TECHNOLOGY**

*Commonly Used AT Includes:*

- ❖ Height Adjustable Exam Tables
- ❖ Visual readout stethoscope
- ❖ Electronic Amplified Stethoscope
- ❖ Digital cuffs for Blood Pressure Monitoring
- ❖ FM listening systems




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### OVERVIEW OF ASSISTIVE TECHNOLOGY

- ❖ Kurzweil text reading equipment
- ❖ ZoomText screen magnification software
- ❖ Livescribe pen & software
- ❖ Real-time speech-to-text services
- ❖ Individual binocular magnifiers
- ❖ Screenreading software
- ❖ Dictation software



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### MEDICAL SCHOOL APPLICANTS WITH DISABILITIES: APPLICATION & INTERVIEW PROCESS

- ❖ Disclosure issues and concerns about stigma that may be unique to this population
- ❖ Accessibility during the interview
  - physical barriers
  - “path of travel” issues
  - communication issues

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### AFTER ADMISSION: PLANNING APPROPRIATE ACCOMMODATIONS



**DETERMINATION OF ACCOMMODATIONS IS AN INDIVIDUALIZED PROCESS**

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**ISSUES FOR ALL MEDICAL STUDENTS WITH DISABILITIES: IN THE CLASSROOM**

- ❖ Access, Support and Accommodative Services
  - Discussion of “traditional” classroom settings; also small-group discussion, large-group instruction, and environmental considerations in the “typical” classroom (e.g., lighting, accessibility, managing adaptive equipment, mobility issues, seating issues, etc.)
  - Use of assistive technology in these settings

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**ISSUES FOR ALL MEDICAL STUDENTS WITH DISABILITIES: IN THE LAB**

- ❖ Access, Support and Accommodative Services
  - Discussion of unique needs of this population when working in a lab setting, likely requiring interaction with the professor and other students as well as using lab equipment
  - Use of assistive technology in these settings

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**ISSUES FOR ALL MEDICAL STUDENTS WITH DISABILITIES: IN THE CLINIC**

- ❖ Access, Support and Accommodative Services
  - Discussion of issues such as use of adaptive devices, patient care issues, and unique issues in more challenging rotations (e.g., surgery)
  - Use of assistive technology in these settings

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**SAMPLE CHAPTER: D/HOH MEDICAL STUDENTS**

- ❖ **Background: Working with Students with Hearing Loss**
  - ❖ **Prior Educational Experiences**
  - ❖ **Diagnosis**
  - ❖ **Language Acquisition**
  - Age of onset
  - Severity of loss
  - Types of hearing loss
- ❖ **Communication**
  - Sign language
  - Speech & Hearing
  - Speechreading
  - Residual Hearing
  - Sign Language
  - Cochlear implants
  - Use of Assistive Tech.

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**SAMPLE CHAPTER: D/HOH MEDICAL STUDENTS: COMMUNICATION STRATEGIES**

- ❖ Choose a quiet, well-lit environment.
- ❖ Make sure you have the person's attention before speaking.
- ❖ Look directly at the person you are speaking to and maintain eye contact.
- ❖ Speak directly to the individual, even if an interpreter is present.
- ❖ Speak clearly and use a normal rate of speech.
- ❖ Avoid standing in front of a light source when speaking.
- ❖ Do not cover your mouth or have anything obstructing your mouth when you are speaking.
- ❖ Ask the person what will make communication easier.
- ❖ State the topic of discussion as you begin. If you change the topic, make sure the listener is aware of the new topic.
- ❖ Use open-ended questions to check for understanding.
- ❖ Repeat the statement, then re-phrase if the person is unable to understand the words spoken.
- ❖ Use natural gestures, facial expressions, and body language to assist with communication.

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**SAMPLE CHAPTER: D/HOH MEDICAL STUDENTS**

- ❖ **Assistive technology**
  - Video relay service
  - *Speech-to-Text Services (CART): in-person or remote*
  - Amplified stethoscope
  - Personal amplification systems (FM loop)
  - Use of Text Pagers
  - Cochlear implants
  - "Pocket talker"
  - Emerging technology

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**SAMPLE CHAPTER: D/HOH MEDICAL STUDENTS**

❖ **Accessibility in the Classroom**

**Helpful Strategies**

- Preparatory Materials ahead of time
- Room Lighting & Acoustics
- Preferential Seating
- Audio-visual Materials
- Notetaking Services
- Interpreting
- Assistive technology

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**SAMPLE CHAPTER: D/HOH MEDICAL STUDENTS**

❖ **Accessibility in the Laboratory**

For students with hearing loss, one of the biggest obstacles in the laboratory setting is *knowing where to look.*

**Helpful Strategies**

- Written instructions
- Visual signals
- Student teams
- Assistive technology

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**SAMPLE CHAPTER: D/HOH MEDICAL STUDENTS**

❖ **Accessibility in Clinical Settings**

**Helpful Strategies**

- Meeting with other hard of hearing medical personnel
- Planning in advance
- Operating Room clear masks
- Interpreting services
- Assistive technology

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**SAMPLE CHAPTER: MEDICAL STUDENTS WITH LD**

- ❖ **Background: Working with Students who have LD**
- ❖ **Diagnosis**
- ❖ **Prior Educational Experiences**
- ❖ **Communication**

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**SAMPLE CHAPTER: MEDICAL STUDENTS WITH LD: ACCOMMODATIONS AND/OR SUPPORT SERVICES**

- ❖ **Notetaking assistance**
- ❖ **Exam accommodations**
- ❖ **Adaptive technology**
- ❖ **Academic strategist/learning coach**

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**SAMPLE CHAPTER: MEDICAL STUDENTS WITH LD**

- ❖ **Assistive technology**
  - “Low tech” supports (e.g., PDA, digital tape recorder)
  - Generic computer-based applications downloaded on laptops, iphones, ipads
  - Mind mapping software (e.g., Inspiration)
  - Notetaking software (e.g., Smart Pens)
  - Spelling/Grammar software (e.g., Ginger)
  - Text-to-voice software (e.g., Kurzweil)
  - Voice-to-text software (e.g., Dragon)

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**SAMPLE CHAPTER: MEDICAL STUDENTS WITH LD**

❖ **Accessibility in the Classroom**

*Possible Learning Support Strategies*

- ❖ Preferential seating (close to instructor)
- ❖ Use of word processor for in-class writing assignments and/or notetaking
- ❖ Permission to tape-record lectures
- ❖ Notetaker in lectures
- ❖ Flexible deadlines for assignments
- ❖ Extended time on tests
- ❖ Use of a reader or scribe for tests

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**SAMPLE CHAPTER: MEDICAL STUDENTS WITH LD**

❖ **Accessibility in the Laboratory**

*Possible Learning Support Strategies*

- Some students with LD may not require any additional supports in lab settings, while others may need supports similar to those offered in the classroom (e.g., notetaking) and/or access to assistive technology

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**SAMPLE CHAPTER: MEDICAL STUDENTS WITH LD**

❖ **Accessibility in Clinical Settings**

*Possible Learning Support Strategies*

- Some students with LD may not require any additional supports in clinical settings, while others may need access to "low tech" strategies (e.g., tape recording notes for later transcription) and/or adaptive technology (e.g., Smart Pens)
- Accommodations **cannot** compromise patient safety or confidentiality

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**MOVING FORWARD**

- ✘ Current Estimated Publication Timeline
- ✘ Sharing the Project at Conferences
- ✘ Keeping the Conversation Going: ListServ?
- ✘ Making Updates as Needed
- ✘ Emerging Assistive Technology
- ✘ Resource List for Schools: How to Get Help

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**THE END**

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